

#### **PA 18-82**—SB 7

**Environment Committee** 

# AN ACT CONCERNING CLIMATE CHANGE PLANNING AND RESILIENCY

**SUMMARY:** This act establishes a new greenhouse gas (GHG) emissions reduction requirement and integrates GHG reductions into various state planning documents and efforts, including the Integrated Resources Plan related to energy procurement, Comprehensive Energy Strategy, and plan of conservation and development.

The act integrates new sea level change projections, determined by UConn's Marine Sciences Division as an update of existing federal projections, into various municipal and state planning documents, including plans of conservation and development and municipal evacuation or hazard mitigation plans. It also applies these projections to the state's coastal management and flood management laws.

Lastly, the act makes several minor, technical, and conforming changes, including (1) decreasing how often the Department of Energy and Environmental Protection (DEEP) commissioner must prepare a state Comprehensive Energy Strategy from every three to every four years and (2) eliminating an obsolete requirement to develop a plan to increase natural gas use and availability.

EFFECTIVE DATE: Upon passage

# **GHG EMISSION REDUCTION**

# New Requirement

The act establishes a new GHG reduction requirement for the state. GHGs are chemical or physical substances emitted into the air that the DEEP commissioner may reasonably anticipate will cause or contribute to climate change, including substances such as carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride (CGS § 22a-200).

Existing law requires the state to reduce its GHG emissions to a level that is at least (1) 10% below 1990's emission level by January 1, 2020 and (2) 80% below 2001's emissions level by January 1, 2050. The act requires it to also reduce GHG emissions to a level that is at least 45% below 2001's emissions level by January 1, 2030. As for the existing reduction requirements, the DEEP commissioner determines the emissions level.

# Integrating Emission Reduction Requirements

Integrated Resources Plan (IRP). By law, DEEP, in consultation with electric companies, must review the state's energy and capacity resource assessment and approve a comprehensive plan for procuring energy resources (i.e., the IRP).

Among other things, the law requires the IRP to be consistent with the state's environmental goals and standards which, under the act, must include the state's GHG reduction goals. The IRP must also seek to lower the cost of electricity, which the act requires it to do while meeting environmental goals and standards in the most cost-efficient manner.

And, by law, the IRP must indicate specific options to reduce electric rates and costs which, under the act, must achieve the state's GHG emission reduction requirements.

Comprehensive Energy Strategy (CES). By law, the DEEP commissioner prepares and updates the state's CES to assess and plan for the state's energy needs, including electricity, heating, cooling, and transportation. Under the act, he must prepare the next CES by October 1, 2020.

In addition to the incorporated content the law requires for the CES (e.g., an assessment and plan for the state's energy needs, findings from other energy-related documents), the act requires the CES to provide necessary analysis and recommendations to guide the state's energy policy to meet the GHG emission reduction requirements in the most cost-effective way. It also requires the CES to include a (1) statement of appropriate energy policies and long-term energy planning objectives and strategies to achieve, among other things, (a) the GHG emission reductions and (b) a least-cost combination of energy supply resources to meet the reductions and (2) strategy for meeting the state's energy efficiency goals.

State Plan of Conservation and Development. The act requires revisions made to the state plan of conservation and development after October 1, 2019, to consider the GHG emission reduction requirements.

### SEA LEVEL CHANGE SCENARIOS

# Updating Sea Level Change Scenarios

Prior law required UConn's Marine Sciences Division to, at least once every 10 years and within available resources, update the sea level change scenarios published in the National Oceanic and Atmospheric Administration's (NOAA) Technical Report OAR CPO-1 (see BACKGROUND). Under the act, the division must instead publish a sea level change scenario for Connecticut that is based upon the report's scenarios and other available scientific data that is necessary for creating a scenario that applies to the state's coast.

Under the act, both the division and DEEP, instead of only the division, must conduct at least one public hearing on the new scenario. The act requires the DEEP commissioner, within 60 days after the last public hearing, to post on DEEP's website (1) the sea level change scenario for the state and (2) a notice that the updated scenario supersedes previous ones.

# Applying New Scenarios

Planning documents. Existing law requires considering sea level change when preparing various planning documents. And under the act, beginning October 1, 2019, the most recent sea level change scenario, rather than NOAA's OAR CPO-

1, must be considered when developing or incorporated into:

- 1. municipal evacuation or hazard mitigation plans,
- 2. the state's civil preparedness plan and program,
- 3. municipal plans of conservation and development, and
- 4. revisions to the state's plan of conservation and development.

Revisions to the state's plan of conservation and development must address the risks and impacts associated with coastal flooding, in addition to coastal erosion, as required under existing law.

Coastal Management Act (CMA). The act incorporates the most recent sea level change scenario into the state's CMA, which provides guidance for and helps regulate activity along the state's coastline (CGS § 22a-90 et seq.). The CMA designates the state's coastal area and the "coastal boundary" within the area and subjects property within the coastal boundary to its regulatory, development, and planning requirements. By law, one of the CMA's general goals and policies is to consider in the planning process the potential impact of sea level rise on coastal development in order to minimize damage.

The act replaces the CMA's definition of "sea level rise" with the most recent sea level change scenario from the division. Prior law specified that sea level rise is the arithmetic mean of the most recent equivalent per decade surface level rise of the state's tidal and coastal waters, as documented by NOAA for its Bridgeport and New London tide gauges.

Flood-proofing. Under the state's flood management laws, "flood-proofing" is making changes that reduce or eliminate flood damage to real property, water and sanitary facilities, and to structures and their contents. For property located in the state's coastal boundary to be considered "flood-proofed," the act requires it to include at least two additional feet of freeboard above base flood level and any additional freeboard necessary to account for the most recent sea level change scenario. (Freeboard is a safety factor, expressed in feet above a calculated flood level, to compensate for unknown factors that contribute to flood heights greater than calculated (e.g., ice jams, debris, wave action).)

The DEEP commissioner has the authority, under the flood management laws, to (1) determine how many and where state-owned structures and state uses may be in the floodplain and (2) identify how to make them less susceptible to flooding, including by flood-proofing. In addition, any state agency proposing an activity within or affecting a floodplain must submit information to the commissioner about the use of flood-proofing techniques (CGS §§ 25-68c and 25-68d).

#### **BACKGROUND**

# NOAA Technical Report OAR CPO-1

The 2012 NOAA Technical Report OAR CPO-1, titled "Global Sea Level Rise Scenarios for the United States National Climate Assessment," provides sea level rise scenarios for analyzing vulnerability, impacts, and adaptation strategies. It identifies four global mean sea level rise scenarios and specifies that they should be used with local and regional information on climatic, physical,

# OLR PUBLIC ACT SUMMARY

ecological, and biological processes and the coastal communities' culture and economy.